

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371

ATTORNEY DOCKET NUMBER  
UPN-4914

U.S. APPLICATION NO. (if known see 37 CFR 1.5)

10/585718

INTERNATIONAL APPLICATION NO.

PCT/US2005/000793

INTERNATIONAL FILING DATE

11 January 2005 (11.01.2005)

PRIORITY DATE CLAIMED

12 January 2004 (12.01.2004)

TITLE OF INVENTION SYSTEM AND METHOD OF UP-REGULATING BONE MORPHOGENETIC PROTEINS  
(BMP) GENE EXPRESSION IN BONE CELLS VIA THE APPLICATION OF FIELDS GENERATED BY SPECIFIC  
AND SELECTIVE ELECTRIC AND ELECTROMAGNETIC SIGNALS

APPLICANT(S) FOR DO/EO/US Carl T. Brighton

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9), and (21) indicated below.
4. ☒ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ has been communicated by the International Bureau.
  - c. ☒ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☐ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☒ have not been made and will not be made.
8. ☐ An English translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) 35 U.S.C. 371(c)(4). (**unexecuted**)
10. ☐ An English translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11. to 20. below concern other document(s) or information included:

11. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A preliminary amendment.
14. ☒ An Application Data Sheet under 37 CFR 1.76.
15. ☐ A substitute specification.
16. ☐ A power of attorney and/or change of address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.182-1.825.
18. ☒ A second copy of the published international application under 35 U.S.C. 154(d)(4).
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20. ☒ Other items or information:
  - a copy of the International Search Report;
  - a copy of the Written Opinion;
  - a return postcard.

EV427090028US

EXPRESS MAIL Mailing Label No. EV 427090028 US  
Date of Deposit: July 11, 2006

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid IMB control number.

U.S. APPLICATION NO. (if known) <b>13/585718</b>		INTERNATIONAL APPLICATION NO. <b>PCT/US2005/000793</b>		ATTORNEY DOCKET NUMBER <b>UPN-4914</b>	
The following fees are submitted:					
21. <input checked="" type="checkbox"/> Basic national fee (37 CFR 1.492(a))		<b>\$300</b>		<b>\$300.00</b>	
22. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c))				\$	
If written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)		<b>\$0.00</b>		<b>\$200.00</b>	
All other situations		<b>\$200</b>			
23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b))					
If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)		<b>\$0</b>			
Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority		<b>\$100</b>		<b>\$100.00</b>	
International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB		<b>\$400</b>			
All other situations		<b>\$500</b>			
<b>TOTAL of 21, 22 and 23 =</b>				<b>\$600.00</b>	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing filed in electronic medium) (37 CFR 1.492(j)). The fee is <b>\$250</b> for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
25- 100 =	0/50 =		X \$250	\$0	
Surcharge of <b>\$130.00</b> for furnishing any of the search fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).				\$	
Claims	Number Filed	Number Extra	Rate		
Total claims	25- 20 =	5	X \$50	<b>\$250.00</b>	
Independent Claims	4- 3 =	1	X \$200	<b>\$200.00</b>	
Multiple dependent claims(s) (if applicable)			+ \$360	\$	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$1,050.00</b>	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$	
<b>SUBTOTAL =</b>				<b>\$525.00</b>	
Processing fee of <b>\$130.00</b> for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				\$	
<b>TOTAL NATIONAL FEE =</b>				<b>\$525.00</b>	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). <b>\$40.00</b> per property +					
<b>TOTAL FEES ENCLOSED =</b>				<b>\$525.00</b>	
				Amount to be refunded	\$
				Amount to be charged	\$

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid IMB control number.

- a. ☒ A check in the amount of \$525.00 to cover the above fee is enclosed.
- b. ☐ Please charge my Deposit Account No. 23-3050 in the amount of \$ \_\_\_\_\_ to cover the above fees. A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 23-3050. A duplicate copy of this sheet is enclosed.

**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

**John W. Caldwell**  
Woodcock Washburn LLP  
One Liberty Place - 46th Floor  
Philadelphia, PA 19103  
(215) 568-3100

  
SIGNATURE

Michael P. Dunnam  
NAME

32,611  
REGISTRATION NUMBER